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(54) Title: AUTOMATIC WHOLE BLOOD COLLECTION SYSTEM
(54) Titre: SYSTÈME DE COLLECTE AUTOMATIQUE DE SANG ENTIER

(57) Abstract

A whole blood collection system includes an automated pump/control unit and an accompanying disposable blood set. When combined and connected to a source of anticoagulant, these elements allow automatic priming of the blood set with anticoagulant and automatic collection of anticoagulated blood product according to three different collection modes. The unit's pump and the blood set are specially designed to cooperate during the collection process to assure that the collected product has a precise blood to anticoagulant ratio. During the collection procedure, the pump/control unit automatically collects data relating to the procedure. Additional data specifically identifying components of the blood set, such as the blood collection bag, along with identification data on the donor's registration form may be scanned into the pump/controller unit by a scanner associated with the unit; this facilitates positive sample identification and tracking. At the end of the procedure, a printer in the pump/controller unit automatically prints out this information so that a detailed record is immediately available about the collected blood product, the procedure for collecting it and the source of the product.

(57) Abrégé

L'invention concerne un système de collecte de sang entier comprenant une unité de pompage/régulation automatisée et un ensemble jetable de collecte de sang associé. Lorsqu'ils sont combinés et reliés à une source d'anticoagulants, ces éléments provoquent l'amorçage automatique de l'ensemble de collecte de sang avec un anticoagulant et une collecte automatique de produit sanguin contenant un anticoagulant selon trois modes de collecte différents. La pompe de l'unité et l'ensemble de collecte de sang sont spécialement conçus de manière à coopérer lors du processus de collecte pour garantir un rapport précis sang/anticoagulant dans le produit recueilli. Lors du processus de collecte, l'unité de pompage/régulation recueille automatiquement des données relatives au processus. Un dispositif de balayage associé à l'unité peut balayer, dans l'unité de pompage/régulation, des données supplémentaires identifiant de manière spécifique des composants de l'ensemble de collecte de sang tels que la poche de collecte de sang, ainsi que des données d'identification se trouvant dans le formulaire d'enregistrement du donneur. Cette opération facilite l'identification et le suivi d'un échantillon positif. A la fin du processus, une imprimante se trouvant dans l'unité de pompage/régulation imprime automatiquement ces données de sorte qu'un dossier détaillé sur le produit sanguin recueilli, le processus de collecte et la source du produit soit immédiatement disponible.

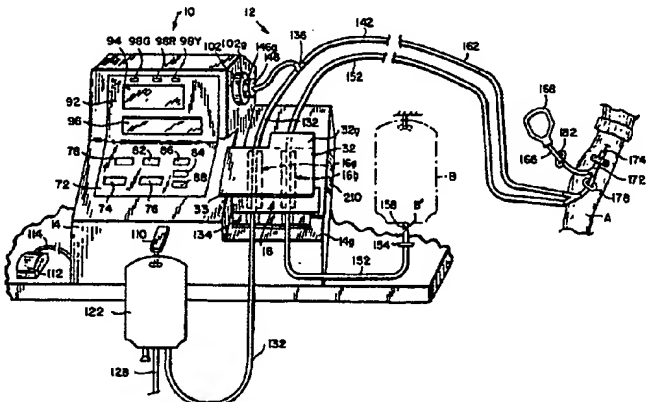
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(57) Abstract			
<p>A whole blood collection system includes an automated pump/control unit and an accompanying disposable blood set. When combined and connected to a source of anticoagulant, these elements allow automatic priming of the blood set with anticoagulant and automatic collection of anticoagulated blood product according to three different collection modes. The unit's pump and the blood set are specially designed to cooperate during the collection process to assure that the collected product has a precise blood to anticoagulant ratio. During the collection procedure, the pump/control unit automatically collects data relating to the procedure. Additional data specifically identifying components of the blood set, such as the blood collection bag, along with identification data on the donor's registration form may be scanned into the pump/controller unit by a scanner associated with the unit; this facilitates positive sample identification and tracking. At the end of the procedure, a printer in the pump/controller unit automatically prints out this information so that a detailed record is immediately available about the collected blood product, the procedure for collecting it and the source of the product.</p>			

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